

AMENDMENTS TO THE CLAIMS:

The listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Original) A machine for printing on containers and applying labels thereto, comprising:

a printing blanket cylinder having a printing blanket thereon with a blank area corresponding to a predetermined area of a container on which no ink is applied;

inking assemblies for applying ink to the printing blanket;

a support member having a plurality of mandrels for holding containers thereon to be printed;

a support member drive for moving the support member to position each mandrel in sequence at a printing position adjacent the printing blanket;

a mandrel drive for rotating each mandrel positioned adjacent the printing blanket in order to rotate a container on said mandrel at the printing position against the printing blanket to print on an exterior surface of said container;

a label applying device for applying a label to the predetermined area of the container on which no ink is applied, substantially simultaneously with printing of the exterior surface of the container; and

a control arrangement for controlling timing of said label applying device, said support member drive and said mandrel drive

in a manner to ensure that the label is applied to the predetermined area on each container.

2. (Original) A machine according to claim 1, wherein said label applying device is positioned at the printing position.

3. (Original) A machine according to claim 1, wherein the label applying device includes:

a grid positioned in facing relation to the exterior surface of the container to be printed;

a web transport assembly for transporting a web having labels spaced apart thereon to a position adjacent said grid;

a peeling device for peeling each label from said web at said position adjacent said grid;

a vacuum supply behind said grid for applying a vacuum through said grid to hold the peeled label against the grid, with an adhesive side of the label facing out; and

an arrangement for applying the held label to the predetermined area of the container against the force of the vacuum supply.

4. (Original) A machine according to claim 3, wherein said arrangement includes at least one air jet for blowing said held label onto the predetermined area of the container.

5. (Original) A machine according to claim 3, wherein said peeling device includes a sharp edge about which said web is transported.

6. (Original) A machine according to claim 1, wherein said control arrangement includes a central processing unit for controlling said timing.

7. (Original) A machine according to claim 1, further comprising an adjustment arrangement for moving at least a portion of the label applying device relative to the mandrel holding the container to be printed.

8. (Original) A machine according to claim 7, wherein said adjustment arrangement includes: -

at least one linear adjustment mechanism; and  
at least one angular adjustment mechanism.

9. (Original) A machine according to claim 8, wherein said at least one linear adjustment mechanism includes:

a first linear adjustment assembly for adjusting said at least a portion of the label applying device in a first linear direction;

a second linear adjustment assembly for adjusting said at least a portion of the label applying device in a second linear direction which is substantially orthogonal to said first direction; and

a third linear adjustment assembly for adjusting said at least a portion of the label applying device in a third linear direction which is substantially orthogonal to said first and second directions.

10. (Original) A machine according to claim 8, wherein said at least one angular adjustment mechanism includes:

a first angular adjustment assembly for adjusting said at least a portion of the label applying device in a first angular direction; and

a second angular adjustment assembly for adjusting said at least a portion of the label applying device in a second angular direction which is substantially orthogonal to said first angular direction.

11. (Original) A machine according to claim 7, wherein said at least a portion of the label applying device includes a grid positioned in facing relation to the mandrel holding the container to be printed, for holding a label thereon.

12. (Original) A method for printing on containers and applying labels thereto, comprising the steps of:

    applying ink to a printing blanket with a blank area corresponding to a predetermined area of a container on which no ink is to be applied;

    positioning containers to be printed on a plurality of mandrels;

    moving the mandrels in sequence to a printing position adjacent the printing blanket;

    rotating each mandrel positioned adjacent the printing blanket in order to rotate a container on said mandrel at the printing position against the printing blanket to print on an exterior surface of said container;

    applying a label to the predetermined area of each container on which no ink is applied, substantially simultaneously with the printing on the container; and . . .

    controlling timing of said steps of label application, mandrel movement and mandrel rotation in a manner to ensure that the label is applied to the predetermined area on each container.

13. (Original) A method according to claim 12, wherein said step of applying the label includes the step of applying the label at the printing position.

14. (Original) A method according to claim 12, wherein said step of applying the label uses a label applying device including a grid positioned in facing relation to a mandrel holding a container, and includes the steps of:

transporting a web having labels spaced apart thereon to a position adjacent said grid;

peeling each label from said web at said position adjacent said grid;

applying a vacuum through said grid to hold the peeled label against the grid, with an adhesive side of the label facing out; and

forcing the held label on the predetermined area of the container against the force of the vacuum supply.

15. (Original) A method according to claim 14, wherein said step of positioning includes the step of blowing said held label onto the predetermined area of the container.

16. (Original) A method according to claim 14, wherein said step of peeling includes the step of transporting the web around a sharp edge adjacent the grid.

17. (Original) A method according to claim 12, further comprising the step of adjusting the position of at least a

portion of the label applying device relative to a position at which the label is to be applied to the container.

18. (Original) A method according to claim 17, wherein said step of adjusting includes the steps of:

providing at least one linear adjustment of said at least a portion of the label applying device relative to the label applying position; and

providing at least one angular adjustment of said at least a portion of the label applying device relative to the label applying position.

19. (Original) A method according to claim 18, wherein said step of providing at least one linear adjustment mechanism includes the steps of:

adjusting said at least a portion of the label applying device in a first linear direction;

adjusting said at least a portion of the label applying device in a second linear direction which is substantially orthogonal to said first direction; and

adjusting said at least a portion of the label applying device in a third linear direction which is substantially orthogonal to said first and second directions.

20. (Original) A method according to claim 18, wherein said step of providing at least one angular adjustment mechanism includes the steps of:

adjusting said at least a portion of the label applying device in a first angular direction; and

adjusting said at least a portion of the label applying device in a second angular direction which is substantially orthogonal to said first angular direction.

21. (Canceled)

22. (Canceled)

23. (Previously Presented) A machine for printing on containers and applying labels thereto, comprising:

a printing device having a printing station for applying printing ink in an image onto an exterior surface of a container thereat;

a movable support for moving containers, one at a time, to said printing station to be printed with said image;

a label applying device for applying a label to an area of the container on which no ink is applied, when said container is at said printing station; and

a control arrangement for controlling timing of said label applying device, said movable support and said printing device in a manner to ensure that the label is applied to said area on each container at said printing station.

24. (Previously Presented) A machine according to claim 23, wherein said label applying device applies a label to said area of the container on which no ink is applied, substantially simultaneously with printing of the exterior surface of the container.

25. (Canceled)

26. (Canceled)

27. (Previously Presented) A method for printing on containers and applying labels thereto, comprising the steps of:

moving containers, one at a time, to a printing station of a printing device;

applying printing ink in an image onto an exterior surface of a container moved to the printing station;

applying a label to an area of the container on which no ink is applied, when said container is at said printing station; and

controlling timing of a label applying device, a device for moving the containers and the printing device in a manner to

ensure that the label is applied to said area on each container at said printing station.

28. (Previously Presented) A method according to claim 27, wherein said step of applying the label to said area of the container on which no ink is applied, occurs substantially simultaneously with printing of the exterior surface of the container.